

REMARKS/ARGUMENTS

Reconsideration and allowance in view of the foregoing amendment and the following remarks are respectfully requested.

Claims 1-17 and 27-29 are now pending.

Claim 1 has been amended above to recite more specifically that the commutator and armature provide a rotating member and that the capacitor is disposed inside the rotating member and not exposed at a peripheral surface of the rotating member. In this regard, applicant has recognized that if a concavity and/or convexity portion such as from the capacitor is disposed on a peripheral surface of the rotating member defined by the commutator and the armature, then fluid resistance is increased so that the power required to operate the motor increases. Consequently, if the capacitor is exposed on the peripheral surface of the rotating member, the efficiency of the motor will decrease. Claim 1 thus requires that the capacitor be disposed within the rotating member and not exposed on the peripheral surface. This advantage of the construction of the invention is thus derived from a fuel pump having a motor as claimed. Applicant has also recognized the advantage that when the capacitor is disposed inside the rotating member, electric connection of the capacitor will be prevented from being disconnected.

Claim 15 has been amended above so as to recite more specifically that the capacitor is disposed on a surface of the commutator segments that is opposite to the contacting surfaces thereof that contact the brushes.

New dependent claims 27-29 have been added. New dependent claim 27 specifies that the commutator and capacitors are resin molded to constitute a single, integrally formed body. With such a structure, the commutator and capacitors can easily be assembled with the armature. New dependent claim 28 specifies more particularly that the armature includes a recessed portion corresponding to the location

of the capacitors. This allows a more compact assembly to be formed in accordance with an example embodiment of the invention. New dependent claim 29 presents the additional detail, also recited in claim 15, which is described for example on page 13, at lines 21-27.

Original claims 1, 3 and 15-17 were rejected under 35 USC 102(b) as being anticipated by Sakuma et al. Applicant respectfully traverses this rejection.

Anticipation under Section 102 of the Patent Act requires that a prior art reference disclose every claim element of the claimed invention. See, e.g., Orthokinetics, Inc. v. Safety Travel Chairs, Inc., 806 F.2d 1565, 1574 (Fed. Cir. 1986). While other references may be used to interpret an allegedly anticipating reference, anticipation must be found in a single reference. See, e.g., Studiengesellschaft Kohle, G.m.b.H. v. Dart Indus., Inc., 726 F.2d 724, 726-27 (Fed. Cir. 1984). The absence of any element of the claim from the cited reference negates anticipation. See, e.g., Structural Rubber Prods. Co. v. Park Rubber Co., 749 F.2d 707, 715 (Fed. Cir. 1984). Anticipation is not shown even if the differences between the claims and the prior art reference are insubstantial and the missing elements could be supplied by the knowledge of one skilled in the art. See, e.g., Structural Rubber Prods., 749 F.2d at 716-17.

As noted above, claim 1 specifically requires that the capacitor be disposed within a rotating member defined by the commutator and the armature. Sakuma does not disclose the above advantageous construction of the invention. In this regard, Sakuma discloses the structure of the spark-quenching element 18 depicted in Figures 5 and 6 as comprised of ring-shaped thin sheets 20 and internal electrodes 21 alternately laminated and that a capacitor is formed by the portions where the internal electrodes 21 overlap, as shown by the shaded portions in Figure 8. As understood from this and Figures 9a-9c in conjunction with Figure 8 it is understood that the structure of Sakuma does not meet the limitations of applicant's claim 1. It is therefore respectfully

submitted that the noted claims are not anticipated by Sakuma. Inasmuch as the record prior art does not motivate the skilled artisan to modify Sakuma to produce the invention claimed, it is respectfully submitted that these claims are not obvious from Sakuma either.

Claim 15 specifically requires that the capacitor be disposed on a side of the segments of the commutator opposite the contact surfaces that contact the brushes. Sakuma also fails to teach or suggest such a commutator configuration and it is therefore respectfully submitted that claim 15 is not anticipated by nor obvious from Sakuma either. In view of the foregoing, reconsideration and withdrawal of the rejection based on Sakuma is solicited.

Claims 2 and 11 were rejected under 35 USC 103(a) as being unpatentable over Sakuma in view of Zepp. Applicant respectfully traverses this rejection.

These claims are submitted to be patentable over Sakuma for the reasons advanced above. The Examiner's further reliance on Zepp does not overcome the deficiencies of the primary combination noted above. It is therefore respectfully submitted that these claims are also allowable.

Claims 4-9 and 12 were rejected under 35 USC 103(a) as unpatentable over Sakuma et al in view of Horski et al. Claim 13 was also rejected under 35 USC 103(a) as unpatentable over Sakuma et al in view of Horski et al. Applicant respectfully traverses these rejections.

These claims are submitted to be patentable over Sakuma for the reasons advanced above. The Examiner's further reliance on Horski does not overcome the deficiencies of Sakuma noted above. It is therefore respectfully submitted that these claims are also allowable over the prior art of record.

Claim 10 was rejected under 35 USC 103(a) as unpatentable over Sakuma et al in view of Horski et al and further in view of Chiba. Applicant respectfully traverses this rejection.

Claim 10 is submitted to be patentable over Sakuma for the reasons advanced above. Applicant respectfully traverses this rejection.

Inasmuch as Horski and Chiba do not overcome the deficiencies of Sakuma it is respectfully submitted that claim 10 is allowable as well.


Claim 14 was rejected under 35 USC 103(a) as unpatentable over Sakuma in view of Kemmner. Applicant respectfully traverses this rejection.

Claim 14 is submitted to be patentable over Sakuma for the reasons advanced above. The Examiner's further reliance on Kemmner does not overcome the deficiencies of Sakuma noted above. It is therefore respectfully submitted that claim 14 is also allowable over the prior art of record.

All objections and rejections having been addressed, it is respectfully submitted that the present application is in condition for allowance and an early Notice to that effect is earnestly solicited.

Respectfully submitted,

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